Claims

1. A carburettor for a two stroke engine including a flow duct comprising rich and lean flow passages in parallel separated by a substantially planar partition, at least one fuel jet communicating with the rich passage, the partition including an aperture towards which the fuel jet is directed, and a substantially planar butterfly valve being received in the aperture so as to be pivotable between a first position, in which the flow duct is substantially closed and the aperture is substantially open, and a second position, in which the flow duct is substantially open and the aperture is substantially closed, the upstream half of the aperture being defined by an upstream semi-annular seating ledge affording an upstream seating surface which is engaged by one of the surfaces of the butterfly valve when it is in the second position and a first end surface which extends between the upstream seating surface and that surface of the partition which is directed towards the lean passage, the downstream half of the aperture being defined by a downstream semi-annular seating ledge affording a downstream seating surface which is engaged by the other surface of the butterfly valve when it is in the second position and a second end surface, which extends between the downstream seating surface and that surface of the partition which is directed towards the rich passage, characterised in that at least one of the upstream semi-annular seating ledge, the downstream semi-annular seating ledge and the valve are so shaped that, in use, a pressure differential is created between the rich and lean passages at the upstream and/or downstream edges of the valve, the pressure in the lean passage being higher than that in the rich passage.

2. A carburettor as claimed in claim 1 in which at least a portion of the upstream seating ledge is of progressively decreasing thickness in the inward direction of the aperture.

3. A carburettor as claimed in claim 2 in which the second end surface is inclined at an angle of between 3° and 30° to the downstream seating surface.

4. A carburettor as claimed in any one of the preceding claims in which at least a portion of the upstream seating ledge is of progressively decreasing thickness in the inward direction of the aperture.

5. A carburettor as claimed in claim 4 in which the first end surface in inclined at an angle of between 3° and 30° to the upstream seating surface.

6. A carburettor as claimed in any one of the preceding claims in which the valve includes a pivot rod on which it is pivotally mounted for rotation between the said first and second positions, the pivot rod being shaped such that it protrudes in to the lean passage only.

7. A carburettor as claimed in any one of the preceding claims in which a part annular wedge is disposed on the surface of the valve that is directed towards the rich passage when the aperture is closed, the wedge comprising an inclined face and a downstream face opposed to the second end surface, the thickness of the wedge increasing from a minimum at the valve surface to a maximum at the wedge downstream face, and arranged such that when the aperture is fully

closed, a gap is formed between the downstream face of the wedge and the second end surface of the downstream seating ledge.

8. A carburettor as claimed in claim 7 in which the maximum thickness of the wedge is substantially the same as the thickness of the downstream seating ledge.

9. A carburettor as claimed in any one of the preceding claims in which a part annular wedge member is disposed on the surface of the valve that is directed towards the lean passage when the aperture is closed, the wedge comprising an upstream face opposed to the first end surface and an inclined face, the thickness of the wedge decreasing from a maximum at its upstream face to a minimum at the valve surface, and arranged such that when the aperture is fully closed, a gap is formed between the upstream face of the wedge and the first end surface of the downstream seating ledge.

10. A carburettor as claimed in claim 9 in which the maximum thickness of the wedge is substantially the same as the thickness of the upstream seating ledge.